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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,137	09/09/2003	Jan Johansson	068758.0136	5394

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EXAMINER

LEWIS, MONICA

ART UNIT PAPER NUMBER

2822

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,137

Applicant(s)

JOHANSSON ET AL.

Examiner

Monica Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the election filed April 11, 2005.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Election/Restrictions

3. Applicant's election of Embodiment I in the reply filed on 4/11/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

4. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Whereas in Figure 3, it is shown that gate finger (11) is connected to the associated metal runner (13), at both their ends, it is not shown that the gate fingers are also connected to the associated metal runner **at predetermined**

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positions along their lengths. Therefore, the following must be shown or the feature(s) canceled from the claim(s): a) gate fingers are also connected to the associated metal runner at predetermined positions along their lengths (See Claim 8). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 7, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Dragon et al. (U.S. Patent No. 6,744,117).

In regards to claim 7, Dragon et al. ("Dragon") discloses the following:

- a) a substrate (12) (For Example: See Figure 3);
- b) a first and second source (19) region spaced apart (For Example: See Figure 3);
- c) a sinker (14) separating said first and second source region (For Example: See Figure 3);
- d) a first and second drain region (20) arranged to define in combination with said first and second source a first and second channel (For Example: See Figure 3);
- e) a first and second gate finger (15) covering said first and second channel, respectively (For Example: See Figure 3);
- f) first and second metal clamps (24) which short-circuit the sinker and the respective source regions on opposite sides of the sinker (For Example: See Figure 3) (Note: In Figure 3, clamps (24) are in direct contact with respective source regions (19) and sinker (14) thereby shorting these regions.);
- g) wherein the first and second metal clamps are separated by a slot that extends between the parallel gate fingers (For Example: See Figure 3); and
- h) a metal runner (25) that extends in the slot between the separate metal clamps (For Example: See Figure 3).

In regards to claim 9, Dragon discloses the following:

- a) the metal runner is provided on a dielectric layer (22) on top of the sinker (For Example: See Figure 3).

In regards to claim 10, Dragon discloses the following:

- a) the metal clamp covers the associated gate finger to shield it from a respective drain region (For Example: See Figure 3).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dragon et al. (U.S. Patent No. 6,744,117) in view of Applicant's Prior Art.

In regards to claim 8, Dragon discloses the following:

a) gate fingers are connected to the associated metal runner at both their ends (For Example: See Figure 4).

In regards to claim 8, Dragon fails to disclose the following:

a) gate fingers are connected to the associated metal runner at predetermined positions along their lengths.

However, Applicant's Prior Art discloses gate fingers that are connected to the associated metal runner at predetermined positions along their lengths (For Example: See Specification Page 3 Lines 17-19 and Page 4 Lines 5-8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Dragon to include gate fingers that are connected to the metal runner at predetermined positions along their lengths as disclosed in Applicant's Prior Art because it aids in improving efficiency (For Example: See Specification Page 3 Lines 7-9).

Additionally, since Dragon and Applicant's Prior Art are both from the same field of endeavor, the purpose disclosed by Applicant's Prior Art would have been recognized in the pertinent art of Dragon.

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10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dragon et al. (U.S. Patent No. 6,744,117) in view of Ng et al. (U.S. Patent No. 5,369,045).

In regards to claim 11, Dragon fails to disclose the following:

a) a well which extends from under the gate fingers and encloses said source regions wherein said well defines the channel.

However, Ng et al. ("Ng") discloses a well (20) that extends from under the gate fingers (26a and 26b) and encloses the source regions (16a and 16b) wherein said well defines the channel (For Example: See Figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the semiconductor device of Dragon to include a well that extends from under the gate fingers and encloses the source regions wherein said well defines the channel as disclosed in Ng because it aids in providing optimal specific on-resistance performance (For Example: See Column 1 Lines 50-66).

Additionally, since Dragon and Ng are both from the same field of endeavor, the purpose disclosed by Ng would have been recognized in the pertinent art of Dragon.

Priority

11. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Allowable Subject Matter

12. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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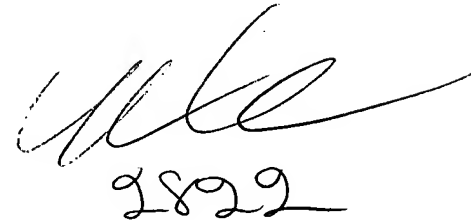
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 571-272-1838.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722 for regular and after final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956

ML

June 13, 2005

A handwritten signature in cursive script, followed by the number 2822 written in a similar cursive style.